

# TABLE OF CONTENTS

## ARTICLE 2.0000 AIR POLLUTION CONTROL REGULATIONS AND PROCEDURES

### Section 2.2300 Banking Emission Reduction Credits

2.2301	Purpose.....	223-01
2.2302	Definitions.....	223-01
2.2303	Applicability .....	223-02
2.2304	Qualifications.....	223-03
2.2305	Creating and Banking Emission Reduction Credits.....	223-04
2.2306	Duration of Emission Reduction Credits .....	223-05
2.2307	Use of Emission Reduction Credits .....	223-05
2.2308	Certificates and Registry.....	223-07
2.2309	Transferring Emission Reduction Credits.....	223-07
2.2310	Revocation and Changes of Emission Reduction Credits.....	223-08
2.2311	Monitoring .....	223-08

## SECTION 2.2300 BANKING EMISSION REDUCTION CREDITS

### 2.2301 PURPOSE

This Section provides for the creation, banking, transfer, and use of emission reduction credits for:

- (1) nitrogen oxides (NO<sub>x</sub>),
- (2) volatile organic compounds (VOC),
- (3) sulfur dioxide (SO<sub>2</sub>),
- (4) fine particulate (PM<sub>2.5</sub>), and
- (5) ammonia (NH<sub>3</sub>)

for offsets under MCAPCO Regulation 2.0531 - "Sources in Nonattainment Areas".

*History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(12);  
Eff. December 1, 2005.*

### 2.2302 DEFINITIONS

For the purposes of this Section, the following definitions shall apply:

- (1) **"Air permit"** means a construction and operation permit issued under MCAPCO Regulation 1.5211 - "Applicability", or MCAPCO Section 1.5500 - "Title V Procedures".
- (2) **"Banking"** means a system for recording emission reduction credits so that they may be used or transferred in the future.
- (3) **"Enforceable"** means enforceable by the Department. Methods for ensuring that emission reduction credits are enforceable include conditions in air permits issued.
- (4) **"Federally designated ozone nonattainment area in North Carolina"** means an area designated as nonattainment for ozone and described in 40 CFR 81.334.
- (5) **"Federally designated fine particulate (PM<sub>2.5</sub>) nonattainment area in North Carolina"** means an area designated as nonattainment for fine particulate (PM<sub>2.5</sub>) and described in 40 CFR 81.334.
- (6) **"Netting Demonstration"** means the act of calculating a "net emissions increase" under the preconstruction review requirements of Title I, Part D of the Federal Clean Air Act and the regulations promulgated there under in MCAPCO Regulation 2.0530 - "Prevention of Significant Deterioration", or MCAPCO Regulation 2.0531 - "Sources in Nonattainment Area" (new source review).
- (7) **"Permanent"** means assured for the life of the corresponding emission reduction credit through an enforceable mechanism such as a permit condition or revocation.
- (8) **"Quantifiable"** means that the amount, rate, and characteristics of the emission reduction credit can be estimated through a reliable, reproducible method.
- (9) **"Real"** means a reduction in actual emissions emitted into the air.
- (10) **"Surplus"** means not required by any local, State, or federal law, rule, order, or

requirement and in excess of reductions used by the Department in issuing any air permit, in excess of any conditions in an air permit to avoid an otherwise applicable requirement, or to demonstrate attainment of ambient air quality standards in MCAPCO Section 2.0400 - "Ambient Air Quality Standards" or reasonable further progress towards achieving attainment of ambient air quality standards. For the purpose of determining the amount of surplus emission reductions, any seasonal emission limitation or standard shall be assumed to apply throughout the year. The following are not considered surplus:

- (a) emission reductions that have previously been used to avoid MCAPCO Regulation 2.0530 or 2.0531 through a netting demonstration;
- (b) Emission reductions in hazardous air pollutants listed pursuant to Section 112(b) of the federal Clean Air Act to the extent needed to comply with MCAPCO Regulation 2.1109 - "112(j) Case-By-Case Maximum Achievable Control Technology", 2.1111 - "Maximum Achievable Control Technology", or 2.1112 - "112(g) Case-By-Case Maximum Achievable Control Technology"; however, emission reductions in hazardous air pollutants that are also volatile organic compounds beyond that necessary to comply with MCAPCO Regulation 2.1109, 2.1111, or 2.1112 are surplus; or
- (c) emission reductions used to offset excess emissions from another source as part of an alternative mix of controls ("bubble") demonstration under MCAPCO Regulation 2.0501 - "Compliance With Emission Control Standards" .

*History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(12);  
Eff. December 1, 2005.*

## **2.2303 APPLICABILITY AND ELIGIBILITY**

(a) Applicability. Any facility that has the potential to emit nitrogen oxides, volatile organic compounds, sulfur dioxide, ammonia, or fine particulate (PM<sub>2.5</sub>) in amounts greater than 25 tons per year and that is in a federally designated ozone or fine particulate (PM<sub>2.5</sub>) nonattainment area in North Carolina shall be eligible to create and bank nitrogen oxides, volatile organic compounds, sulfur dioxide, ammonia, or fine particulate (PM<sub>2.5</sub>) emission reduction credits.

(b) Eligibility of emission reductions.

- (1) To be approved by the Director as an emission reduction credit, a reduction in emissions shall be real, permanent, quantifiable, enforceable, and surplus and shall have occurred:
  - (A) for ozone after December 31, 2002 for the Charlotte-Gastonia-Rock Hill, NC-SC nonattainment area, (*note: additional nonattainment areas in North Carolina outside Mecklenburg County and throughout the state are listed in the state rule*).
  - (B) for fine particulate (PM<sub>2.5</sub>) after December 31, 2002 (*note: all areas in North Carolina listed in the state rule are outside Mecklenburg County*).

- (2) To be eligible for consideration as emission reduction credits, emission reductions may be created by any of the following methods:
  - (A) installation of control equipment beyond what is necessary to comply with existing Regulations;
  - (B) a change in process inputs, formulations, products or product mix, fuels, or raw materials;
  - (C) a reduction in actual emission rate;
  - (D) a reduction in operating hours;
  - (E) production curtailment or reduction in throughput;
  - (F) shutdown of emitting sources or facilities; or
  - (G) any other enforceable method that the Director finds resulting in real, permanent, quantifiable, enforceable, and surplus reduction of emissions.

(c) Ineligible for emission reduction credit. Emission reductions from the following are not eligible to be banked as emission reduction credits:

- (1) sources covered under a special order or variance until compliance with the emission standards that are the subject of the special order or variance is achieved;
- (2) sources that have operated less than 24 months; or
- (3) emission allocations and allowances used in the ~~nitrogen-oxide~~ budget trading program under MCAPCO Regulation 2.1419 - "Nitrogen Oxide Budget Trading Program" or 2.2408 - "Trading Program and Banking";
- (4) emission reductions outside North Carolina; or
- (5) mobile sources.

*History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(12)  
Eff. December 1, 2005;  
Amended Eff. July 1, 2007.*

## **2.2304 QUALIFICATION OF EMISSION REDUCTION CREDITS**

For purposes of calculating the amount of emission reduction that can be quantified as an emission reduction credit, the following procedures shall be followed:

- (1) The source's average actual annual emissions before the emission reduction shall be calculated in tons per year. In calculating average actual annual emissions before the emission reduction, data from the 24-month period immediately preceding the reduction in emissions shall be used. The Director may allow the use of a different time period, not to exceed seven years immediately preceding the reduction in emissions if the owner or operator of the source documents that such period is more representative of normal source operation.
- (2) The emission reduction credit generated by the emission reduction shall be calculated by subtracting the allowable annual emissions rate following the reduction from the average actual annual emissions prior to the reduction.

*History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(12);  
Eff. December 1, 2005.*

## **2.2305 CREATING AND BANKING EMISSION REDUCTION CREDITS**

(a) The owner or operator of a source seeking to create and bank emission reduction credits shall submit over the signature of the responsible official for a Title V facility or the official identified in MCAPCO Regulation 1.5212 - "Applications" Paragraph (i) for a non-Title V facility the following information, which may be on an application form provided by the Department:

- (1) the company name, contact person and telephone number, and street address of the source seeking the emission reduction credit;
- (2) a description of the type of source where the proposed emission reduction occurred or will occur;
- (3) a detailed description of the method or methods to be employed to create the emission reduction;
- (4) the date that the emission reduction occurred or will occur;
- (5) quantification of the emission reduction credit as described under MCAPCO Regulation 2.2304 - "Qualification of Emission Reduction Credits";
- (6) the proposed method for ensuring the reductions are permanent and enforceable, including any necessary application to amend the facility's air permit or, for a shutdown of an entire facility, a request for permit rescission;
- (7) whether any portion of the reduction in emissions to be used to create the emission reduction credit has previously been used to avoid MCAPCO Regulation 2.0530 - "Prevention of Significant Deterioration" or Regulation 2.0531 - "Sources in Nonattainment Areas" (new source review) through a netting demonstration;
- (8) any other information necessary to demonstrate that the reduction in emissions is real, permanent, quantifiable, enforceable, and surplus, and
- (9) a complete permit application if the permit needs to be modified to create or enforce the emission reduction credit.

(b) If the Director finds that:

- (1) all the information required to be submitted under Paragraph (a) of this Regulation has been submitted;
  - (2) the source is eligible under MCAPCO Regulation 2.2303 - "Applicability and Eligibility";
  - (3) a complete permit application has been submitted, if necessary, to implement the reduction in emissions; and
  - (4) the reduction in emissions is real, permanent, quantifiable, enforceable, and surplus;
- the Director shall issue the source a certificate of emission reduction credit once the facility's permit is modified, if necessary, to reflect permanently the reduction in emissions. The Director shall register the emission reduction credit for use only after the reduction has occurred.

(c) Processing schedule.

- (1) The Department shall send written acknowledgement of receipt of the request to create and bank emission credits within 10 days of receipt of the request.

- (2) The Department shall review all requests to create and bank emission credits and notify the applicant within 30 days as to whether the application is complete or incomplete for processing purposes. If the application is incomplete the Department shall notify the applicant of the deficiency. The applicant shall have 90 days to submit the requested information. If the applicant fails to provide the requested information within 90 days, the Department shall return the application.
- (3) The Director shall either approve or disapprove the request within 90 days after receipt of a complete application requesting the banking of emission reduction credits. Upon approval the Director shall issue a certificate of emission reduction credit.

*History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(12);  
Eff. December 1, 2005.*

#### **2.2306 DURATION OF EMISSION REDUCTION CREDITS**

Banked emission reduction credits are permanent until withdrawn by the owner or until withdrawn by the Director under MCAPCO Regulation 2.2310 - "Revocation and Changes of Emission Reduction Credits".

*History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(12);  
Eff. December 1, 2005.*

#### **2.2307 USE OF EMISSION REDUCTION CREDITS**

(a) Persons holding emission reduction credits may withdraw the emission reduction credits and may use them in any manner consistent with this Section.

(b) An emission reduction credit may be withdrawn only by the owner of record or by the Director under MCAPCO Regulation 2.2310 - "Revocation and Changes of Emission Reduction Credits" and may be withdrawn in whole or in part. In the case of a partial withdrawal, the Director shall issue a revised certificate of emission reduction credit to the owner of record reflecting the new amount of the credit and shall revoke the original certificate.

(c) Emission reduction credits may be used for the following purposes:

- (1) as offsets or netting demonstrations required by MCAPCO Regulation 2.0531 - "Sources in Nonattainment Areas" (new source review) for a major new source of:
  - (A) nitrogen oxides or volatile organic compounds in a federally designated ozone nonattainment area, or
  - (B) fine particulate (PM<sub>2.5</sub>) in a federally designated PM<sub>2.5</sub> nonattainment area;
- (2) as offsets or netting demonstrations required by MCAPCO Regulation 2.0531 for a major modification to an existing major source of:
  - (A) nitrogen oxides or volatile organic compounds in a federally designated ozone

- nonattainment area, or
    - (B) fine particulate (PM<sub>2.5</sub>) in a federally designated PM<sub>2.5</sub> nonattainment area;
  - (3) as part of a netting demonstration required by MCAPCO Regulation 2.0530 - "Prevention of Significant Deterioration" when the source using the emission reduction credits is the same source that created and banked the emission reduction credits; or
  - (4) to remove a permit condition that created an emission reduction credit.
- (d) Emission reduction credits generated through reducing emissions of one pollutant shall not be used for trading with or offsetting of another pollutant, for example emission reduction credits for volatile organic compounds in an ozone nonattainment area shall not be used to offset nitrogen oxide emissions.
- (e) Limitations on use of emission reduction credits.
- (1) Emission reduction credits shall not be used to exempt a source from:
    - (A) prevention of significant deterioration requirements found in MCAPCO Regulation 2.0530 - "Prevention of Significant Deterioration" for netting demonstrations unless the emission reduction credits have been banked by the facility at which the new or modified source is located and have been banked during the period specified in MCAPCO Regulation 2.0530. This Subparagraph does not preclude the use of emission reductions not banked as emission credits to complete netting demonstrations.
    - (B) nonattainment major new source review found in MCAPCO Regulation 2.0531 - "Sources in Nonattainment Areas" unless the emission reduction credits have been banked by the facility at which the new or modified source is located and have been banked during the period specified in MCAPCO Regulation 2.0531. This Subparagraph does not preclude the use of emission reductions not banked as emission credits to complete netting demonstrations.
    - (C) new source performance standards found in MCAPCO 2.0524 - "New Source Performance Standards", national emission standards for hazardous air pollutants found in MCAPCO Regulation 2.1110 - "National Emission Standards for Hazardous Air Pollutants", or maximum achievable control technology found in MCAPCO Regulation 2.1109 - "112(j) Case-By-Case Maximum Achievable Control Technology", Regulation 2.1111 - "Maximum Achievable Control Technology", or 2.1112 - "112(g) Case-By-Case Maximum Achievable Control Technology"; or
    - (D) any other requirement of the Ordinance unless the emission reduction credits have been banked by the facility at which the new or modified source is located.
  - (2) Emission reduction credits shall not be used to allow a source to emit above the limit established by a Regulation in this Ordinance. (If the owner or operator wants to permit a source to emit above the limit established by a Regulation in Article 2.0000 of this Ordinance, he needs to follow the procedures in MCAPCO 2.0501 - "Compliance With Emission Control Standards" for an alternative mix of controls ["bubble"]). Emissions reduction credits cannot be used to permit a source to emit above a limit

established by a Regulation in MCAPCO Section 2.1100 - "Control of Toxic Air Pollutants.)

*History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(12);  
Eff. December 1, 2005.*

## **2.2308 CERTIFICATES AND REGISTRY**

(a) Certificates of emission reduction credit issued by the Director shall contain the following information:

- (1) the pollutant reduced (nitrogen oxides, volatile organic compounds, sulfur dioxide, ammonia, or fine particulate);
- (2) the amount of the credit in tons per year;
- (3) the date the reduction occurred;
- (4) company name, the street address and county of the source where the reduction occurred; and
- (5) the date of issuance of the certificate.

(b) The Department shall maintain an emission reduction credit registry that constitutes the official record of all certificates of emission reduction credit issued and all withdrawals made. The registry shall be available for public review. For each certificate issued, the registry shall show the amount of the emission reduction credit, the pollutant reduced, the name and location of the facility generating the emission reduction credit, and the facility contact person. The Department shall maintain records of all deposits, deposit applications, withdrawals, and transactions.

*History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(12);  
Eff. December 1, 2005.*

## **2.2309 TRANSFERRING EMISSION REDUCTION CREDITS**

(a) If the owner of a certificate of emission reduction credit transfers the certificate to a new owner, the Director shall issue a certificate of emission reduction credit to the new owner and shall revoke the certificate held by the current owner of record.

(b) If the owner of a certificate of emission reduction credit transfers part of the emission reduction credits represented by the certificate to a new owner, the Director shall issue a certificate of emission reduction credit to the new owner reflecting the transferred amount and shall issue a certificate of emission reduction credit to the current owner of record reflecting the amount of emission reduction credit remaining after the transfer. The Director shall revoke the original certificate of emission reduction credit.

(c) For any transferred emission reduction credits, the creator of the emission reduction credit shall continue to have enforceable conditions in the appropriate permit to assure permanency of



the emission reduction and shall be held liable for compliance with those conditions; the user of any transferred emission reduction credits shall not be held liable for any failure of the creator to comply with its permit.

*History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(12);  
Eff. December 1, 2005.*

## **2.2310 REVOCATION AND CHANGES OF EMISSION REDUCTION CREDITS**

(a) The Director may withdraw emission reduction credits if the emission credits:

- (1) have already been used;
- (2) are incorrectly calculated; or
- (3) achieved are less than those claimed.

(b) If a banked emission reduction credit were calculated using an emission factor and the emission factor changes, the Director shall revise the banked emission reductions credit to reflect the change in the emission factor. If a banked emission reduction credit has been used, then no change shall be made in the used credit.

(c) When a Regulation is adopted or amended in this Ordinance after November 1, 2005, the Director shall adjust the banked emission reduction credits to account for changes in emissions that would be allowed under the new emission limitation with which the source must currently comply if it is still operating. If a source has permanently ceased operations, then the Director shall make no adjustments in its banked emissions reduction credits. If a banked emission reduction credit has been used, no change shall be made in the used credit.

*History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(12);  
Eff. December 1, 2005.*

## **2.2311 MONITORING**

The Director shall require the owner or operator of a source whose emissions are being reduced to create an emission reduction credit to verify the reduction in emissions with a source test, continuous emission monitoring, or other methods that measure the actual emissions or may require the use of parametric monitoring to show that the source or its control device is being operated in the manner that it is designed or is permitted.

*History Note: Authority G.S. 143-215.3(a)(1); 143-215.66; 143-215.107(a)(12);  
Eff. December 1, 2005.*